CITY OF MOUNTAIN VIEW

APPLICATION FOR INDUSTRIAL WASTES DISCHARGE PERMIT

Date 11-10-83 No.

A. Name or Organization NEC ELECTRONICS U.S.A. INC.

Address 550 EAST MIDDLEFIELD ROAD, MOUNTAIN VIEW, CA 94043

Address of Point of Discharge 501 ELLIS STREET, MOUNTAIN VIEW, CA 94043 (415) 964-4321 Telephone

Individual Responsible for Industrial Waste Name MICHAEL KIERIG

Signature

Attach Map Showing Point of Discharge, Sampling Points, and Waste Treatment Facility

B. X Flow Rate: Average _____ gals/day Max. 122,010 gals/day Peak Hourly _____ GPM

C. Submit separate statement:

1. Detailing type of industry and nature of products
2. Listing chemicals used and approximate concentrations
3. Describing waste treatment facilities
4. Giving characteristics of exceptional industrial wastes
5. Concerning radioactive wastes
6. Naming organic solvents discharged and concentration at point of discharge

L. Indicate the point of discharge concentration of the following characteristics and mass emission rates where applicable.

Biochemical oxygen demand (B.O.D.)	< 2 mg/l	Grease and oil, total	< 0.1 mg/l
Chemical oxygen demand (C.O.D.)	29 mg/l	Hydrogen Ion content pH	7.8
Total Solids, Average	< 1 mg/l	Fluoride	1.6 mg/l
Suspended Solids, Average	0.03 mg/l	Temperature	60-65 °F

	Max. Conc. Allowable mg/l	Allowable Mass Emission Rate kg/day		Adv. Conc. Allowable mg/l	Adv. Conc. Mass Emission Rate kg/day
Arsenic	0.1	0.001	Cyanides	1.0	< 0.02
Barium	5.0	< 0.1	Formaldehyde	5.0	< 0.1
Beryllium	1.0	< 0.0001	Lead	0.5	0.003
Boron	1.0	< 0.1	Manganese	1.0	0.0064
Cadmium	0.1	< 0.0001	Mercury	0.05	< 0.0001
Chromium Hexavalent	1.0	0.002	Nickel	1.0	< 0.02
Chromium Total	2.0	< 0.01	Phenols	1.0	1.2
Cobalt	1.0	< 0.001	Selenium	2.0	< 0.001
Copper	2.0	< 0.01	Silver	5.0	< 0.0001
Cresols	2.0	< 0.05	Zinc	5.0	< 0.01

NOT TO BE COMPLETED BY APPLICANT

Permit to Discharge Industrial Wastes in Accordance with This Application Subject to Attached General and Specific Conditions

Maintenance Director Date

Permit to Discharge Exceptional Industrial Waste Approved

List Details:

Maintenance Director 379 Date

MD-6A (1-83) DIST: Original - File; Copy - Discharger; Copy - Water Quality Control Plant

1. NEC Electronic U. S. A. Inc., - Semiconductor manufacturer, 501 Ellis Street Mountain View is the current sole location for Wafer Fabrication.

2. Chemical currently in use at this facility:

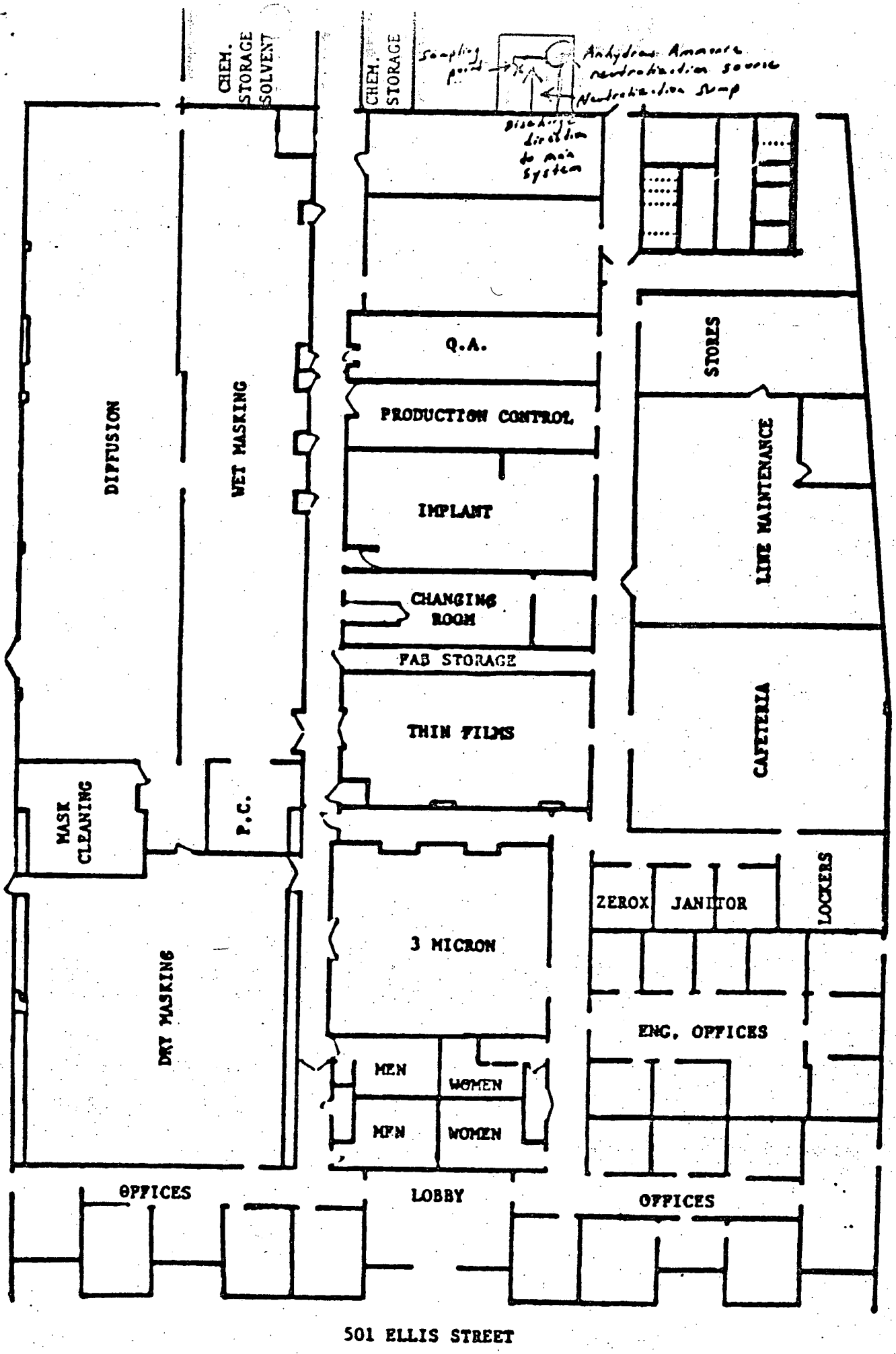
- Glacial Acetic Acid (100%)
- Nitric Acid (to 70%)
- Phosphoric Acid (85%)
- Sulfuric Acid (95%)
- Hydrochloric Acid (70%)
- Hydrofluoric Acid (to 49%)
- Ammonium Fluoride (58%)
- Ammonium Phosphate (100%)
- Hydrogen Peroxide (30%)
- Hexamethyl Disilazane (up to 50%)
- Isopropyl Alchohol
- 1,1,1 Trichloroethane 1,1,2 Trichloro 1,2,2,
- Trifluoroethane
- Toluene
- Xylene
- Methyl Alcohol
- N-Butyl Acetate
- Burmar 712 D
  - < 25.% Phenol
  - < 50.% Trichlorobenzene
  - < 25% Sulfonic Acid
  - < 25% Other Aromatics
- Acetone
- KTI Positive Photoresist Stripper R-10
  - 70% Diethylane glycol monobutyl ether
  - 30% Ethanol Amine

3. Waste treatment facility consists of acid neutralization sump, utilizing anhydrous ammonia as the agent.

4. ----------

5. ----------

6. KTI Positive Photoresist Stripper R-10 at 960 gallons/year.



501 ELLIS STREET